

Patent Claims

1. Cell preparation for therapeutic and/or cosmetic application in humans and/or animals, containing human or animal cells which were cultivated using a substance or mixtures of substances which activate(s) the CD44 expression of these cells and to which cells hyaluronic acid and/or the physiologically compatible salts thereof and/or fragments herefrom are bonded.
2. Cell preparation according to the preceding claim, characterised in that the proportion of the compound or compounds selected from hyaluronic acid, the physiologically compatible salts of hyaluronic acid and the fragments of these compounds is from 0.001 to 5.0% by weight relative to the total formulation.
3. Cell preparation according to claim 1 or 2, characterised in that the substance which activates the CD44 expression of the cells is at least a local anaesthetic and/or a derivative and/or a mixture herefrom.
4. Cell preparation according to one of the preceding claims, characterised in that the used cells are of autologous, allogeneic or xenogeneic origin.
5. Cell preparation according to one of the preceding claims, characterised in that the cells are chondrocytes, keratinocytes, fibroblasts and/or meniscus cells.
6. Cell preparation according to one of the preceding claims, characterised in that the cells are isolated from tissue or have originated from other cell systems by differentiation processes.

7. Cell preparation according to one of the preceding claims, characterised in that chondrocytes are contained which were isolated from the cartilage tissue or have originated from other cell systems by differentiation processes.
8. Cell preparation according to one of the preceding claims, characterised in that keratinocytes are contained which were isolated from the epidermis or have originated from other cell systems by differentiation processes.
9. Cell preparation according to one of the preceding claims, characterised in that fibroblasts are contained which were isolated or have originated from other cell systems by differentiation processes.
10. Cell preparation according to one of the preceding claims, characterised in that meniscus cells are contained which were isolated from the meniscus tissue or have originated from other cell systems by differentiation processes.
11. Cell preparation according to one of the preceding claims, characterised in that, in addition, chondroitin, chondroitin sulphates and fragments are contained in these compounds.
12. Cell preparation according to one of the preceding claims, characterised in that, in addition, one or more components of the physiological cartilage are contained.
13. Cell preparation according to one of the preceding claims, characterised in that, in addition, one or more substances with radical interceptor properties, one or more substances with a steroidal or corticosteroidal effect, one or more non-steroidal antiphlogistics, one or more analgesics, one or more substances

with an inhibitory effect on prostaglandin synthesis, in particular lipoxygenase inhibitors, cyclo-oxygenase inhibitors and phospholipase A2 inhibitors, one or more growth-stimulating or growth-regulating substances (so-called growth factors), one or more vitamins, one or more antioxidants and/or one or more substances with water-binding properties are contained.

14. Cell preparation according to one of the preceding claims, characterised in that it is preferably present in the form of a matrix, a solution, a suspension, an emulsion, a paste, a salve, a gel, a cream, a lotion or a spray.
15. Use of a cell preparation according to one of the preceding claims for therapeutic and/or cosmetic application in humans and/or animals.
16. Use of a cell preparation according to one of the claims 1 to 15 for producing a pharmaceutical.
17. Use of a cell preparation according to the preceding claim, for producing an intraarticularly, intradiscally, subcutaneously, intracutaneously or epicutaneously (topically) applicable transplantate.
18. Use according to one of the claims 15 to 17, for the treatment of degenerative diseases of human or animal joints, in particular for the treatment of traumatic diseases of all human or animal joints, for the therapy, prophylaxis and metaphylaxis of articular diseases and of articular function defects, for the therapy, prophylaxis and/or metaphylaxis of articular cartilage and cartilage bone defects, for the therapy, prophylaxis and/or metaphylaxis of meniscus and intervertebral disc diseases, for the cosmetic and/or therapeutic treatment of extraarticular cartilage defects and/or for

the therapy, prophylaxis and/or metaphylaxis of tissue defects of the skin organ for medical and/or cosmetic application.

19. Method for producing a cell preparation according to one of the claims 1 to 14, by cultivating human or animal cells, using a substance or mixtures of substances which activate(s) the CD44 expression of these cells, and by bonding hyaluronic acid and/or the physiologically compatible salts thereof and/or fragments herefrom to these thus pre-treated cells.
20. Method according to claim 19, characterised in that the cultivation of the cells is effected over a timespan of 6 to 15, preferably 9 to 11 days, and then the substance which activates the CD44 expression is set.
21. Method according to claim 20, characterised in that the hyaluronic acid and/or the salts thereof and/or the fragments thereof are bonded 12 to 72 hours, preferably 24 to 48 hours after addition of the substance which activates the CD44 expression of the cells.